CHAPTER Vlt
LXFU'KNCK W TIIK INDIVIDUAL JU'UOTION.S ON THE REACTION TKMPK1UTU.HK
(«) KNKHUY CONTKNT COHUKHKWPINO TO TIIK COMBUSTION HEAT OF CARBON.
ON JK %27 it in shown that by the incomplete combustion
GO
of V by O from 1 kilogramme C, --t> kilogrammes CO or,
nu'usurod in normal conditions, 1*R(» cubic metres CO can originate, for which by formula ((5) 1-8(5X Q"S = 0*93 cubic itHttrti 0 in mjulriHl. Thin CO IB combustible, and can by HUWUH of oxygen ho converted into carbonic acid according to
llui tHftmtion CO-f'O,- CO.*, whereby 28 kilogrammes 00+ If* kilogrammtm O=44 kilogrammoB OOa in furnished. On diviHion by tho renpoctive weighIH of the individual
gfiHOK, one ohUiiiH . £rrr=22*a cubic metres CO, ^^-==.
11-1C cubic niotree 0, '^^=22-5) cubic metres CO* That
in to fiiiy, 1 cubic inutni CO + 1 cubic metre 0 yield 2 cubic moires COa * - - (IH). For tho combuBtion of 1'8C cubic iimttum (•(>, thtjroforo, 0"(J*I cubic metres 0 is required, and as a product of tho reaction 1'HG cubic metren COa must result.
Tbcirc! IK iwiHM-wary, therefore, for the combustion of 1 kito^ramnu) (.! to 1*815 cubic matron CO (ride f>), an amount of O'!»:i cuhicj mutroH 0, and for l*8r> cubic nietroB CO to 1'8(> C02 (ntt? IH) H!HO 0'9H cubic «iotrc.B 0, or a total for the combustion of 1 kilogramme C to 1'8(> cubic metres COa of 1*86 cubic incline O* ctorrtiHponding to the iormulw (2) and (4).
Thin knowledge teachoB that the sanio causes bring about tho 8umu actiouH, ThuH, the quantity of heat evolved by the UwwtoombuHtkmof 1 kilogramme C with 1'HG cubic metres 0